

IN THE CLAIMS

Claim 1. A piezo-driven parts feeder that conveys parts by generating vibration with a vibration generator including an elastic member having a piezoelectric element mounted thereto to align the parts, comprising:

a moving table having or supporting the parts conveying member;

a fixed table disposed below the moving table, for supporting the moving table so as to freely vibrate the moving table through the vibration generator;

the vibration generator including a first elastic member and a piezoelectric element mounted to the first elastic member, one end of the first elastic member being fixed to the moving table and the other end of the first elastic member being fixed to the fixed table; and

a support member including a second elastic member different from the first elastic member, one end of the second elastic member being fixed to the moving table and the other end of the second elastic member being fixed to the fixed table,

wherein the parts conveying track includes a spiral part, the first elastic member is formed approximately in L-shape and arranged almost horizontally between the upper moving table and the lower fixed table, and

wherein a first side of the L-shape extends toward the center of the fixed table, the end of the extending side being fixed to the fixed table, and a second side of the L-shape is fixed to the moving table.

Claims 2-6 (Cancelled).

Claim 7. A piezo-driven parts feeder according to Claim [[6]] 1, wherein the width of the first side of the L-shape extending toward the center of the moving table is inclined

approximately at an angle relative to the vertical direction equal to that of the second elastic member relative to the vertical direction.

Claim 8. A piezo-driven parts feeder ~~according to Claim 1~~ that conveys parts by generating vibration with a vibration generator including an elastic member having a piezoelectric element mounted thereto to align the parts, comprising:

a moving table having or supporting the parts conveying member;

a fixed table disposed below the moving table, for supporting the moving table so as to freely vibrate the moving table through the vibration generator;

the vibration generator including a first elastic member and a piezoelectric element mounted to the first elastic member, one end of the first elastic member being fixed to the moving table and the other end of the first elastic member being fixed to the fixed table; and

a support member including a second elastic member different from the first elastic member, one end of the second elastic member being fixed to the moving table and the other end of the second elastic member being fixed to the fixed table, wherein:

the fixed table is supported by a base through a third elastic member, wherein

the spring constant of the third elastic member is smaller than either of the spring constants of the first elastic member and the second elastic member.

Claims 9-12 (Cancelled).